



PRICING MATH

CHAPTER 27



Ch 27 Sec 2 – Calculating Discounts

What you'll learn . . .

- The general procedure for figuring discounts
- How to calculate various kinds of discounts



CALCULATING DISCOUNTS

- Discounts are reductions in the price of goods and services sold to customer.
 - Multiply the price (P) by the discount percentage $D(\%)$ to get the dollar amount of the discount $D(\$)$.
 - Subtract the discount from the price to get the net price (NP)



EMPLOYEE DISCOUNTS

- Discounts offered to employees to encourage workers to buy the products they sell or manufacture.
- Can range from 10% to 30% or entry-level employee up to 50% or more for top-level executives.



DISCOUNTS FROM VENDORS

- Cash
- Trade
- Quantity
- Seasonal
- Promotional



CASH

- Given to customers who pay in cash.
- Invoice terms 3/15, net 60
 - 3 is the percent of discount
 - 15 is the days from the date on the invoice to get the discount
 - 60 is the number of days from the date on the invoice that the payment in full is due.
- Determine the dollar discount $P \times D(\%) = D(\$)$
- Determine net price $P - D(\$) = NP$



Practice 1

- Big Jim's Trucking receives an invoice in the amount of \$175,000 showing the terms 2/10, net 30. If Big Jim's takes advantage of the discount, what will be the net amount due on the invoice?
 - $\$175,000 \times .02 = 3500$
 - $\$175,000 - 3500 = \$171,500$



TRADE DISCOUNTS

- Based on manufacturers' list prices -- not really discounts at all, but the way prices are quoted to wholesalers and retailers.
 - Determine the dollar discount $P \times D(\%) = D(\$)$
 - Determine net price $P - D(\$) = NP$



Practice 2

- A manufacturer gives retailers a 45-percent trade discount. The invoice received by ABC Department Store totals \$235,795; what is the amount of the store's discount? What is the amount payable to the manufacturer?
 - $\$235,795 \times .45 = \$106,107.75$ (discount)
 - $\$235,795 - 106,107.75 = \$129,685.25$ (amount payable)



QUANTITY DISCOUNTS

- Offered to customers ordering large quantities.
 - $P \times D(\%) = D(\$)$
 - $P - D(\$) = NP$



Practice 3

- Suppose a firm is required to buy \$10,000 worth of goods by August 15 in order to qualify for a 10-percent cumulative quantity discount. Would a firm that purchased \$5,000 worth of goods on August 1 get the discount? What about one that purchased \$10,500 worth on August 20?
 - No, because the minimum quantity is \$10,000.
 - No, because the deadline date was August 15.



PROMOTIONAL DISCOUNTS

- Given to businesses that agree to advertise or in some other way promote a manufacturer's products.
 - Divide the dollar discount by the original price.
 - $D(\$) / P = D(\%)$.
 - Change the decimal to a percentage by shifting the decimal two places to the right.



Practice 4

- A manufacturer offers a retailer \$750 as a promotional discount for advertising a certain product. What is the percentage discount if the total invoice was \$37,500?
 - $\$750 / \$37,500 = .02$ (2 percent)



SEASONAL DISCOUNTS

- Offered to encourage buyers to purchase goods long before the actual consumer buying season.
 - $P \times D(\%) = D(\$)$
 - $P - D(\$) = NP$



Practice 5

- Pedzinger Shoe Company offers retailers a 5-percent discount for placing orders by June 1. A retailer takes advantage of the offer and purchases \$78,290 worth of shoes by the cutoff date. What is the net amount payable on the invoice?
 - $\$78,290 \times .95 = \$74,375.50$